

# MATERIAL SAFETY DATA SHEET

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Version 3

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

**Product name:** X-OMAT Developer Starter  
KODAK X-OMAT Developer Starter

**Product code:** 1332642

**Supplier** Carestream Health, Inc., 150 Verona Street, Rochester, New York 14608

Emergency telephone number  
CHEMTREC: +1-703-527-3887 (INTERNATIONAL)  
1-800-424-9300 (NORTH AMERICA)

For other information contact: 800-328-2910

**Product Use:** Photographic chemical. Restricted to professional users.

## 2. HAZARDS IDENTIFICATION

### Warning!

#### Emergency Overview

May cause central nervous system depression

**Physical state** liquid

**Odor** Odorless

**Color** colorless

#### HMIS

**Health Hazard** - 1

**Flammability** - 0

**Physical - 0  
Hazard**

#### Potential Health Effects

**Eyes**

May cause slight irritation.

**Skin**

Substance may cause slight skin irritation.

**Inhalation**

Expected to be a low hazard for recommended handling. May cause irritation of respiratory tract.

**Ingestion**

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause central nervous system effects.

**Chronic Effects**

**Chronic toxicity**

Effects expected to be similar to those seen acutely.

**Aggravated Medical Conditions**

None known.

**Environmental hazard**

See Section 12 for additional Ecological Information.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous

| Chemical Name | CAS-No | Weight % |
|---------------|--------|----------|
|---------------|--------|----------|

|                      |               |                 |
|----------------------|---------------|-----------------|
| Sodium bromide       | 7647-15-6     | 10-15           |
| Non-Hazardous        |               |                 |
| <b>Chemical Name</b> | <b>CAS-No</b> | <b>Weight %</b> |
| Water                | 7732-18-5     | 80-90           |

#### 4. FIRST AID MEASURES

|                           |   |
|---------------------------|---|
| <b>General advice</b>     | IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.   |
| <b>Eye contact</b>        | Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention immediately if irritation persists.                  |
| <b>Skin contact</b>       | Wash off immediately with plenty of water. If skin irritation persists, call a physician .  |
| <b>Inhalation</b>         | Move to fresh air in case of accidental inhalation of vapors. Get medical attention immediately if symptoms occur.                        |
| <b>Ingestion</b>          | Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention. |
| <b>Notes to physician</b> | Treat symptomatically.  |

#### 5. FIRE-FIGHTING MEASURES

|                                       |   |
|---------------------------------------|---|
| <b>Flash point:</b>                   | > 93.400 °C   |
| <b>Suitable Extinguishing Media</b>   | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| <b>Unsuitable Extinguishing Media</b> | None.   |
| <b>Hazardous Combustion Products</b>  | Thermal decomposition can lead to release of irritating gases and vapors.                               |

#### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**                      **Health Hazard** - 2                      **Flammability** - 0                      **Stability** - 0

#### 6. ACCIDENTAL RELEASE MEASURES

|                                |   |
|--------------------------------|---|
| <b>Personal precautions</b>    | Avoid contact with eyes. For personal protection see section 8.   |
| <b>Methods for Containment</b> | Prevent further leakage or spillage if safe to do so.   |
| <b>Methods for cleaning up</b> | Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). |
| <b>Other information</b>       | See Section 12 for additional information.  |

#### 7. HANDLING AND STORAGE

**Advice on safe handling** Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Ensure adequate ventilation. Wash thoroughly after handling.

**Technical measures/Storage conditions** Keep tightly closed in a dry and cool place.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### Occupational Exposure Controls

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

### Personal Protective Equipment

**General Information** These recommendations apply to the product as supplied.

**Respiratory protection** None required under normal usage. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

**Eye/Face Protection** Safety glasses with side-shields.

**Skin and body protection** Wear suitable protective clothing.

**Hand Protection** Chemical resistant gloves. Avoid natural rubber gloves.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state** liquid

**ph** 6.6

**Flash point:** > 93.400 °C

**Boiling point/boiling range** > 100 °C / >212 °F

**Vapor Pressure** 24 mbar @ 20 °C

**Vapor density** 0.6

**Density** No information available

**Water Solubility** completely soluble

**Melting point/range:** No information available

**Specific Gravity** 1.106

**Bulk Density:** No information available

**Odor** Odorless

**Color** colorless

**Autoignition temperature:** No information available

## 10. STABILITY AND REACTIVITY

**Stability** Stable under normal conditions.

**Incompatible products** Strong oxidizing agents.

**Conditions to Avoid** Heat.

**Hazardous Decomposition Products** Hydrogen bromide.

**Hazardous Polymerization** None under normal processing.

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## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity - Product Information

|                   |   |
|-------------------|---|
| <b>Skin</b>       | Substance may cause slight skin irritation.   |
| <b>Eyes</b>       | May cause slight irritation.  |
| <b>Inhalation</b> | Expected to be a low hazard for recommended handling. May cause irritation of respiratory tract.                          |
| <b>Ingestion</b>  | Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause central nervous system effects. |

### Acute toxicity - Component Information

| Chemical Name        | LD50 Oral  | LD50 Dermal             | LC50 Inhalation |
|----------------------|--|-------------------------|-----------------|
| Water                | 90,000 mg/kg ( Rat )   |                         |                 |
| Sodium bromide       | 3400 mg/kg ( Rat )   | > 2000 mg/kg ( Rabbit ) |                 |
| <b>Chemical Name</b> | <b>Other applicable information</b>  |                         |                 |
| Sodium bromide       | Ingestion of bromide salts can cause nausea, vomiting, headache, irritability, delirium, memory loss, decreased appetite, joint pain, hallucinations, stupor, coma, and acne like rash on face, legs, and trunk. |                         |                 |

|                             |   |
|-----------------------------|---|
| <b>Subchronic toxicity</b>  | No information available  |
| <b>Chronic toxicity</b>     | Effects expected to be similar to those seen acutely.                       |
| <b>Carcinogenicity</b>      | Contains no ingredients above reportable quantities listed as a carcinogen. |
| <b>Target Organ Effects</b> | Gastrointestinal tract (GI), Central nervous system.                        |

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

**Ecotoxicity effects** Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

### Component Information

| Chemical Name | Toxicity to algae | Toxicity to fish | Toxicity to daphnia and other aquatic invertebrates |
|---------------|-------------------|------------------|---|
|---------------|-------------------|------------------|---|

|                |  |   |   |
|----------------|--|---|---|
| Sodium bromide | 5800 - 24000 mg/L EC50 96 h (Scenedesmus pannonicus) | LC50 24000 - 96000 mg/L Oryzias latipes 96 h LC50= 24000 mg/L Oryzias latipes 96 h LC50 16000 - 24000 mg/L Poecilia reticulata 96 h LC50= 16000 mg/L Poecilia reticulata 96 h LC50 15614 - 17428 mg/L Pimephales promelas 96 h LC50> 1000 mg/L Lepomis macrochirus 96 h LC50 0.054 - 0.081 mg/L Oncorhynchus mykiss 96 h LC50> 1000 mg/L Oncorhynchus mykiss 96 h | EC50 5800 - 48000 mg/L 48 h (Daphnia magna) EC50 5700 - 10800 mg/L 48 h (Daphnia magna) |
|----------------|--|---|---|

**Persistence and degradability** Not readily biodegradable

**Bioaccumulation:** - No information available

**Mobility** - No information available

**Other adverse effects**  
 No information available

### 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods** Dispose of in accordance with local regulations.

**Contaminated packaging** Do not re-use empty containers. Dispose of in accordance with local regulations.

### 14. TRANSPORT INFORMATION

The information given below is provided to assist in documentation. It may supplement the information on the package. The package in your possession may carry a different version of the label depending on the date of manufacture. Depending on inner packaging quantities and packaging instructions, it may be subject to specific regulatory exceptions. Please consult the product packaging for further details.

**DOT** Not regulated

**TDG** Not regulated

**ICAO/IATA** Not regulated

**IMDG/IMO** Not regulated

For transportation information, go to: <http://ship.carestreamhealth.com>.

### 15. REGULATORY INFORMATION

#### **International Inventories**

|               |          |
|---------------|----------|
| TSCA          | Complies |
| DSL/NDL       | Complies |
| EINECS/ELINCS | Complies |
| ENCS          | Complies |
| IECSC         | Complies |
| KECL          | Complies |

|       |          |
|-------|----------|
| PICCS | Complies |
| AICS  | Complies |
| NZIoC | Complies |

#### Legend

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

#### U.S. Federal Regulations

##### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

##### **SARA 311/312 Hazard Categories**

|                                   |    |
|-----------------------------------|----|
| Acute Health Hazard               | No |
| Chronic Health Hazard             | No |
| Fire Hazard                       | No |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard                   | No |

##### **Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

##### **Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

##### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

##### **TSCA**

This product does not contain any chemicals regulated under TSCA Section 4, Section 5(a), Section 8(a) or Section 8(d).

#### U.S. State Regulations

##### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

##### **U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated by state right-to-know regulations

#### International Regulations

|                |                      |
|----------------|----------------------|
| Mexico - Grade | Slight risk, Grade 1 |
|----------------|----------------------|

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## 16. OTHER INFORMATION

### Disclaimer for Label

The data below reflects current legislative requirements whereas the product in your possession may carry a different version of the label depending on the date of manufacture.

### Warning!

- Contains:

#### Hazardous Components

| Chemical Name  | CAS-No    | Weight % |
|----------------|-----------|----------|
| Sodium bromide | 7647-15-6 | 10-15    |

May cause central nervous system depression.

Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Ensure adequate ventilation. Wash thoroughly after handling.

Additional information is given in the Material Safety Data Sheet.

#### Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text